Hirata Valve Industry Co., Ltd.

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CABLES: "VALVEHIRATA" TOKYO
TEL: 03-(431)5176-9

MAIN PRODUCTS:
CAST STAINLESS STEEL, CAST STEEL,
FORGED STEEL & OTHER ALLOY STEEL VALVES
BANKERS: THE DAIICHI KANGYO BANK LTD
THE MITSUBISHI BANK, LTD

FACTORY:
15, HISAMOTO
TAKATSU-KU, KAWASAKI,
TEL: 044-(833)-2311~7
N ASME

Kawasaki, November 12, 1979
Our Ref. No. SH-355

United States
Nuclear Regulatory Commission
Region IV
Attention: Mr. Karl V. Seyfrit
611 Ryan Plaza Drive, Suite 1000
Arlington, Texas 76012
U. S. A.

Gentlemen:

Subject: Response to Docket No. 99900355/79-02

We acknowledge receipt of your inspection report, Docket No. 99900355/79-02, dated October 2, 1979.

Upon receipt of the docket, we have studied those problems reported therein, for which we have taken or will take corresponding corrective actions and preventive measures as summarized in a Response Statement enclosed.

Now that such actions and measures have been taken by us, it is considered that the deviations from commitment were successfully settled and our QA program is being implemented in compliance with the NRC requirements.

This is also to inform you that no information of proprietary nature is contained either in the Docket mentioned above or in the Response Statement enclosed.

We hope this will meet with your requirements.

Sincerely yours,

Y. Hirata
Vice President, Kawasaki Div.
Hirata Valve Industry Co., Ltd.

Enclosure 1: Hirata Valve Response Statement

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Hirata Valve Industry Co.,Ltd.

Hirata Valve Statement
in response of Docket No. 99900355/79-02

Deviation "A"

1. Findings

The Hirata Valve Industry Co., Ltd. (HV) corrective action response letter of April 12, 1979, states in part with respect to Item D of Inspection Report No. 79-01. ". . . b. The WPS and CMTR of welding materials used for the repair, were received and accepted by us, and the vendor's statement requesting a correction of the WPS No. shown on the Applicable Weld Repair Records, were also attached to each of the records."

Contrary to the above, the vendor's statement requesting a correction of the WPS No. shown on Weld Repair Record (WRR) 7-1037A, was not attached to the WRR. This WRR was applicable to the disc identified in Item D of Inspection Report No. 79-01.

2. Steps that have been or will be taken by Hirata to correct the problem

The vendor's statement requesting a correction of the WPS No. shown on Weld Repair Record (WRR) No. 7-1037A, was attached to the WRR by a QE Section member.

2-1. Steps that we plan to take to assure corrections as committed

For each of deviations indicated in "Notice of Deviation", the QA Manager will issue a "Corrective Action Request" to the Section Chief responsible for the implementation of the corrective actions.
Upon verification of the implementation of corrective actions, each responsible Section Chief will submit a written "Corrective Action Report" to the QA Manager who is responsible for reporting it to the Vice President, Kawasaki Division.

3. Steps that have been or will be taken by Hirata to prevent recurrence

a. The QE Section Chief conducted training and indoctrination of the QE Section personnel with respect to Hirata system for documentation control and filing method.

b. Additional steps as stated in para. 2-1 above, will be taken to prevent recurrence of this sort of deviation.

4. Date Corrective actions/preventive measures were or will be completed

a. Corrective actions as stated in para. 2 above, were completed on August 28, 1979.

b. Preventive measures as stated in para. 3 above, were completed on October 12, 1979.

Deviation "B"

1. Findings

Paragraph 5.10.3 in Section 5 of the QA Manual states in part, "The Welding Group Foreman is responsible for assuring that welders comply with the WPS and DWP by checking that the Specification parameters are being maintained. . . ."

Contrary to the above, current checks performed by the Welding Group foreman did not assure welder compliance with the WPS and DWP, as evidenced by the observation of travel speed and Tungusten electrode extension values being used in production hardsurfacing operations, that were in excess of those permitted by the applicable DWP (See Details, C.3.a.).

2. Steps that have been or will be taken by Hirata to correct the problem

a. Hirata welding procedure specification, WPS No. HVPS-118 Rev.1, will be revised to have it provide a more realistic range with respect to hardsurfacing travel speed and Tungusten electrode extension.
The Tungusten electrode extension is not an essential variable, and the travel speed was not over 10% of the travel speed of the PQR, therefore, a revised WPS can be prepared without requalification.

b. Hirata welding procedure specification, WPD No. HVPS-119 Rev.1, will be revised to have it provide a more realistic range with respect to hardsurfacing travel speed value which is identified as none-essential variable in the Code, therefore, the revised WPS can be prepared without requalification.

c. The above two (w) WPSs thus revised to further revision No.2 respectively, will be submitted to Customer for review and approval, and upon receipt of the approval from the customer, the relating DWP No. 118-A18 Rev.0 and DWP No. 119-C02 Rev.0, will be revised respectively to comply with the revised welding procedure specification.

d. The Manufacturing Section Chief gave instruction to welders to comply with specification parameters in the applicable WPS and DWP in the production operations and to the Welding Group Foreman to assure welders' compliance with the WPS and DWP by checking the specification parameters being maintained in production welding.

3. Steps that have been or will be taken by Hirata to prevent recurrence

a. The Manufactruing Section Chief conducted training and indoctrination of the welding group personnel with regard to the importance of their being in compliance with requirements of Hirata QA Manual, WPS and DWP, and other applicable instructions.

b. The Manufacturing Section Chief will conduct a technical audit as often as necessary to assure welders' compliance with parameters of the WPS and DWP.

c. The QA Manager gave the QE Section Chief and the Inspcetion Section Chief an instruction that their Section personnel should frequently observe welding operations to assure welder's compliance with WPS and DWP.

d. Documentation for training and indoctrination activities stated in para.3(a) above, and for those activities performed subsequent to receipt of instruction ststed in para. 3(c) above, were entered into the QA General files.

4. Date corrective actions/preventive measures were or will be completed

a. Two (2) WPSs to be revised as stated in para.2 above, will be submitted to the Customer by the end of November 1979, and the revision of relative DWPs will be made within ten (10) days after receipt of the Customer's approval of the WPSs.

b. Preventive measures as stated in para 3 above, were completed on October 19, 1979.

Deviation "C"

1. Findings

Paragraphs NB/NC/ND - 5521 (a) in the ASME Section III Code state in part, "Personnel performing nondestructive examinations will be qualified in accordance with SNT-TC-1A . . . . "

Sub-paragraph 2 of paragraph 8.2.d. in SNT-TC-1A states with respect to the practical examination requirements for NDT Level I and Level II personnel, "At least one selected specimen shall be tested, and the results of the test shall be analyzed by the person considered for certification."
Sub-paragraph 3 of paragraph 8.2.d. states, "The description of the specimen, the test procedure, including checkppoints, and the resluts of the examination shall be documented." Paragraph 8.6.4. states in part, ". . . . Test objects shall be used in the practical examination, and at least 90% of the known indications should be found . . . ."

Contrary to the above, the documentation of the liquid penetrant practical examination administered to two (2) Level II personnel, did not contain either a description of the test specimen used, or the results with respect to percentage of known indications found.

2. Steps that have been or will be taken by Hirata to correct rthe problem

a. In order to correct the deficiencies in documentation of the previous examination, Level III PT examiner will conduct and grade again the liquid penetrant practical examination administering to two (2) Hirata Level II PT personnel using at least one (1) selected specimen with known type and number of indications.

b. The description of the specimen used in the test and the results of test with respect to percentage of known indications found, will be documented as required in SNT-TC-1A. These will be added to the present qualification records, which contains a checklist showing 90% of the indications found.

c. Any specimen used in the test will be retained by the Level III PT examiner.

3. Steps that have been or will be taken by Hirata to prevent recurrence

Level III PT examiner established a new record form for liquid penetrant practical examination to Level II PT personnel, to document the test and the results of test as required in SNT-TC-1A.

4. Date corrective actions/preventive measures were or will be completed

a. Corrective actions as stated in para.2 above, will be completed by November 30, 1979.

b. Preventive measures as stated in para.3 above, were completed on October 12, 1979.

Deviation "D"

1. Findings

Paragraph 7.4.3 in specification NPS 0011 (Hirata Purchase Specification for Austenitic Stainless Steel Castings) states in part with respect to vendor radiographic methods, "The RT method shall accord with Hirata Procedure No. NAF-14, but shall be executed on the RT Detail Procedure that the supplier shall prepare and Hirata shall have approved . . . ."

Contrary to the above, Nippon Stainless Steel Co., Ltd. Detail Procedure, NS-C-13061 Revision 1, was approved by Hirata Valve for use on Purchase Order No. 0019, although using a radiographic method that was not in accordance with Hirata Procedure No. NAF-14 requirements, with respect to penetrameter selection and allowed geometric insharpness (See Details Section, E.3.a.(1)).

2. Steps that have been or will be taken by Hirata to correct the problem

a. for penetrameter selection:

(1) This problem was solely caused by a misleading and inadequate description of Hirata Procedure with respect to selection of type of penetrameter. In order to clarify the requirements and to preclude users from misunderstanding of the requirements, paragraph 6.1.4.(4) of Hirata Procedure No. NAF-14 Rev.2, will be revised by an addition of "For forgings: The radiographic quality level shall be 2-4T for section thickness up to and including 3/4 in. (19 mm) and 2-2T for section thickness greater than 3/4 in.." and foot note No.4 of Table 3 of the same will be deleted in its entirety.

(2) Hirata Procedure No. NAF-14 Rev.3 thus revised, will be submitted to Customer for review and approval.

(3) No action has been taken to correct Nippon Stainless Steel Co., Ltd. Detailed Procedure No. NS-C-13061 Rev.1, due to the fact that the procedure meets requirements called for in effect in Hirata Procedure No. NAF-14 Rev.2, and those revised and called for in the same with Rev.3.

b. Geometric unsharpness:

(1) This problem was solely caused by an inadequate description of Hirata procedure requirements with respect to geometrical unsharpness, and in order to correct it, paragraph 6.12.13 of Hirata Procedure No. NAF-14 Rev.2, will be corrected to read: "For forgings, bars and weldments: The source-object distance shall be decided from the limited value of geometrical unsharpness given on Table 7. For castings : The source-object distance is desirous to be within the limited value of geometrical unsharpness given on Table 7."

(2) Hirata Procedure No. NAF-14 Rev.3 thus revised, will be submitted to Customer for review and approval.

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(3) No action has been taken to correct Nippon Stainless Steel Co., Ltd. Detailed Procedure No. NS-C-13061 Rev.1, due to the fact that the Hirata's requirements with respect to geometrical unsharpness was only for reference and guideline purposes, as referenced in ASTM E-94-68, paragraph 10.4.

3. Steps that have been or will be taken ty Hirata to prevent recurrence

With respect to this particluar finding, the QA Manager conducted training and indoctrination of the personnel who would prepare Hirata Procedures and those who would review those procedures for adequacy and compliance with the Code,, and the QE Section Chief conducted those of the QE Section personnel who would review the Hirata Procedures as well as vendor's Procedures furnished for review and approval prior to application.

Documentation of the above activities have been retained in the QA General files.

4. Date corrective actions/preventive measures were or will be completed

a. Two (2) WPSs to be revised as stated in para. 2 above, will be submitted to the Customer by the end of November 1979.

b. Preventive measures as stated in para. 3 above, were completed on September 20, 1979.

Deviation "E"

1. Findings

Paragraph 3.4.2.1 in Section 3 of the QA Manaual states in part with respect to Material Service Document Checklist (MSD), "The MSD is used by the QE Section personnel to verify receipt and correctness of: . . . . (b) Documentary evidence of performance and quality furnished by the vendor, including Certified Material Test Reports or Certificates of Compliance in accordance with the Code . . . ."

Contrary to the above, use of an MSD with respect to Certified Material Test Report (CMTR) No. 0163M did not verify the correctness of quality in accordance with the Code, in that the CMTR was accepted by Hirata Valve, although demonstrating that the vendor (Mitsubishi Steel Manufacturing Co., Ltd., Hirota Steel Works) has exceeded the postweld heat treatment qualification of the welding procedure used for casting weld repairs (See Details Section E.3.a(2)).

2. Steps that have been or will be taken by Hirata to correct the problem

a. The QA Manager sent a letter of September 4, 1979, to Mitsubishi Steel Mfg. Co., Ltd., Hirota Steel Works, in which he requested the vendor: (1) to comply with the purchase specification and the Code with respect to postweld heat treatment time, and (2) to furnish us the vendor's welding procedure qualification record (PQR) with 4.9 hours or more postweld heat treatment time concerning items on a CMTR No. 0163M, because WPS No. HMI-14-06 previously furnished to Hirata, has been qualified only with three (3) hours postweld heat treatment time, i.e. allowing use in application up to 3.75 hours component postweld heat treatment.

b. Upon receipt of a PQR with five (5) hours postweld heat treatment from the vendor, the QE Section personnel verified again receipt and completeness of the CMTR No. 0163M using an MSD, and the QE Section Chief reviewed the CMTR to assure that it meets the requirements of the purchase specification and the Code. Being identified and checked off on the MSD as reviewed and accepted, the CMTR and PQR were entered into the QA files respectively.

3. Steps that have been or will be taken by Hirata to prevent recurrence

a. For any CMTR for castings with weld repair, the QE Section Chief will review it for compliance with the purchase specification and the Code with respect to postweld heat treatment conditions applied in performing castings weld repair.

b. The QE Section Chief established a training and indoctrination plan and schedule with respect to this particular finding, and conducted training and indoctrination of the QE Section personnel who would verify receipt and completeness of CMTR.

c. Documentations for the activities stated in para. 3 (b) above, have been retained in the QA General Files.

4. Date corrective actions/preventive measures were or will be completed

a. Corrective actions as stated in para. 2 above, were completed on November 12, 1979.

b. Preventive measures as stated in para.3 above, were completed on October 20, 1979.

Deviation "F"

1. Findings

Paragraph 3.1.5 in Section 3 of the QA Manaual states in part, "After completion of the survey, the assigned surveyors shall prepare and submit a written report with the completed Vendor Survey/Audit Checklist to the QA Manager. The report shall recommend one of the following. . . . (b) The vendor should make recommended correction . . . . " Paragraph 3.1.6 states in part, "The QA Manager shall review the report and approve or disapprove the vendor for listing on the Qualified Vendors List . . . . The List shall designate, for each vendor . . . . product or services qualified to supply with any limitations . . . ."

Contrary to the above:

1. A resurvey of a currently listed qualified vendor (Mitsubishi Steel Manufacturing Co., Ltd., Hirota Steel Works) was not performed subsequent to identification of deficiencies in a March 25, 1978, survey, as evidenced by the absence of any written report relative to a resurvey and reidentification of some of the same deficiencies during the next scheduled annual survey performed on February 27, 1979.

2. The Qualified Vendors List did not designate required limitations on the use of this vendor, or Sumida Kogyo Co., Ltd., with respect to Charpy-V impact testing to be performed on the Hirata impact machine. (See Details Section, F.3.a)

2. Steps that have been or will be taken by Hirata to correct the problem

a. for failure to perform required re-survey:

In compliance with the recommendation for the correction of deficiencies identified in the previous survey report, the QA Manager established requirements and schedule for the re-survey of Mitsubishi Steel Manufacturing Co., Ltd., Hirota Steel Works, and performed the re-survey of the vendor.
He verified and assured that the corrections of the reported deficiencies had been fully implemented by the vendor, and documented the re-survey activities in a report.

b. for failure to designate use limitation:

The QE Section Chief verified the specific limitation on the use of Mitsubishi Steel Manufacturing Co., Ltd., Hirota Steel Works, and Sumida Kogyo Co., Ltd. respectively identified in the relative survey report and vendor audit/survey checklists.
He designated in the Qualified Vendors List the use limitation on those two (2) vendors that Charpy-V impact testing is to be performed on the Hirata impact machine, and distributed copies of the corrected List to the officers and offices concerned within Kawasaki Division.

3. Steps that have been or will be taken by Hirata to prevent recurrence

a. The QA Manager established a new form of re-survey report which provides spaces for recording observation during resurvey and for recording results of vendor' implementation of the correction of deficiencies.
Prior to performance of the required re-survey, the QA Manager will provide for training and indoctrination of assigned surveyers to apprise them of documentation and reporting of re-survey results, and method of follow ups to verify implementation of solution to reported problem.

b. Prior to preparation or revision of Qualified Vendors List, the QE Section Chief will verify use limitation of vendor identified in the latest survey report, completed vendor audit/survey report checklist and other applicable documents, if any.

4. Date corrective actions/preventive measures were or will be completed

a. Corrective actions as stated in para.2 above, were completed on November 8, 1979.

b. Preventive measures as stated in para. 3 above, were completed on September 7, 1979.

Unresolved Item

Item No. 1

Subject:

Procurement Document Control - QA program does not address how revision of procurement is accomplished. During the inspection it was established that changes in requirements are made by HV using a Valve Engineering Communication Sheet, with similar review and approval requirements as apply to original purchase order. The system in use is not documented, however, and is considered unresolved pending inclusion of mechanics and controls for accomplishing this function in the documented QA program.

Step that we plan to take:

A system for accomplishing and controlling changes in procurement requirements is to be established and documented in the Revision No. 8 of QA Manaual.

Item No. 2

Subject:

Procurement source selection - Paragraph 3.1.2 (d) in Section 3 of the QA Manaual permits the QA Manager to qualify vendors, without performing a survey, for those items and services not included in the scope of the ASME Code.
This latitude is inconsistent with 10 CFR 50, Appendix B, to which HV is contractuary obligated, in that 10 CFR 50 Appendix B, is applicable to all safety related items, not symply pressure boundry materials.
This matter is considered unresolved pending definition of valve safety significant items by HV and applicable procurement controls. This matter will be further examined at the next scheduled inspection of this factory.

The status quo:

Vendors for those items and services not included in the scope of ASME Code, have been qualified by desk survey which has been conducted by the Planning Section Chief with reference documents, such as vendor's experience list, past supply performance records, etc.